

MWRA ADVISORY BOARD
Summary of the
MWRA BOARD OF DIRECTORS' MEETING
October 13, 1999

A meeting of the Board of Directors of the Massachusetts Water Resources Authority was held on October 13, 1999 at the Authority Headquarters in Charlestown. **Present:** Chairman Robert Durand, Gubernatorial Representative; John Carroll and Norman Jacques, Advisory Board Representatives; Robert Spinney and Andrea d'Amato, City of Boston Representatives; Lucile Hicks, Gubernatorial Representative; Marie Turner, Town of Winthrop Representative. Joseph MacRitchie, City of Quincy Representative attended the Executive Session. **Absent:** Andrew Pappastergion, Advisory Board Representative; Vincent Mannering, City of Boston Representative; Donald Mitchell, Gubernatorial Representative.

AGENDA

Report of the Chair - No Report.

Report of the Executive Director

Douglas MacDonald, Executive Director of the MWRA, stated that the Court of Appeals declined EPA's request to overturn Judge Stern's order for a trial regarding appropriate water treatment. (A trial date of December 6 has since been set.)

Mr. MacDonald also reported that the HUD Appropriations bill has been passed by the Congress containing \$2 million for MWRA CSO Programs. He noted that the November 3rd Board meeting will take place in the morning with the afternoon set aside as a retreat for the discussion of debt cap and the Capital Improvement Program.

Chairman Durand will extend an invitation to Senator Stephen Lynch to attend the December Board of Directors meeting to discuss the North Dorchester Bay CSO Project. Senator Lynch had requested a meeting with the Board. Discussion will center on the concerns of Boston residents regarding the location of a pump station for this project. Massport's Conley Terminal has been mentioned as a substitute location for the pump station, and a detailed report was sent to Massport requesting their comments. Mr. MacDonald stated that a site visit would be scheduled so that Board members would have first-hand knowledge regarding the sites. He extended an invitation to the Advisory Board and its Executive Committee. The Advisory Board has had a keen interest in this project.

APPROVALS

Agreement with Boston Gas for Local Gas Distribution Services at the Sludge Pelletizing Facility

The Board voted to authorize the Executive Director, on behalf of the Authority, to execute a ten-year agreement with Boston Gas for local gas distribution services at the pelletizing facility.

For the first two years, the contract will be fixed at \$13,000 per month, or \$156,000 per year, regardless of gas usage at the plant. For the remaining eight years, the charges will be \$15,000 per month, or \$180,000 per year, for annual gas usage less than 700,000 MMBTUs. For annual gas usage greater than 700,000 MMBTUs, there will be an additional charge of \$0.17 per MMBTU. The contract term will begin on the first day of the month following approval by the Massachusetts Department of Telecommunications and Energy (DTE), and will remain in effect until the end of the 120th month after the effective date.

In an effort to reduce the cost of natural gas used at the pelletizing facility, the MWRA undertook the design of a direct pipeline connection between the interstate gas pipeline and the pelletizing facility, which would bypass the Boston Gas local distribution system. After completion of a geologic investigation and near-final design of the bypass, Boston Gas offered to enter into a special ten-year contract at fixed monthly rates.

A comparison of the costs of an agreement with Boston Gas versus the costs of constructing and operating the MWRA bypass pipeline showed that the Boston Gas agreement was the lower cost option, while offering the greatest future flexibility. The authorization for this agreement obviates the need to construct the bypass pipeline, for which \$250,000 of \$489,000 (51%) has been expended to date for design.

Mr. Jacques asked, "How big a customer is the MWRA for Boston Gas?" Staff replied that the MWRA would be at the top end of a medium sized customer. The Authority is a large consumer, and faced with the prospect of zero revenue from the MWRA, Boston Gas made this offer.

Extension of Contract Employees – Waterworks, Support Services and Finance

The Board voted to approve an extension of the employment contract of Henry Valcour, Engineer, Waterworks Capital Engineering and Construction Department (CECD), for one year from October 26, 1999 to October 25, 2000, increasing his hourly rate from \$35.00 to \$36.40.

The Board voted to approve an extension of the employment contract of Christine Pierga, Compensation Specialist, Human Resources Department, Support Services Division, through April 15, 2000 at an hourly rate of \$35.00 and increasing the not to exceed dollar limit by \$5,000 to a total of \$20,560.

The Board voted to approve an extension of the employment contract of Jan McGinn, Official Statement Specialist, Finance Division, for one year commencing November 1, 1999 at an hourly rate of \$38.00, not to exceed \$10,000 annually.

Appointment of Assistant Director – Construction, Engineering & Construction Department

The Board voted to approve the Executive Director's recommendation to appoint Michael J. Schweihs to the position of Assistant Director – Construction in the Engineering and Construction Department at an annual salary of \$83,912.40, to be effective on the date designated by the Executive Director. Mr. Schweihs has been Acting Assistant Director since February 11, 1999.

FY00 PCR Amendments – October

The Board voted to approve amendments to the Position Control Register (PCR), including:

1. Reclassification of positions in the Metering and Monitoring Unit of the Waterworks Division that reflect the final phase of its reorganization.
2. Reclassification of positions in the MIS Department to support changing Division systems and to reflect the increased complexity presented by new applications and some of the integrated systems currently under development.

Memorandum of Agreement Between the U.S. Army Corps of Engineers, the Massachusetts Historical Commission and the MWRA Concerning the Cummingsville Branch Replacement Sewer Project

The Board voted to authorize the Executive Director, on behalf of the Authority, to execute a Memorandum of Agreement (MOA) with the U.S. Army Corps of Engineers and the Massachusetts Historical Commission concerning construction work that may impact remains of the historic Middlesex Canal as part of the Cummingsville Branch Replacement Sewer Project.

In 1995, the MWRA published the Cummingsville Branch Sewer Facilities Plan, which recommended construction of a new sewer to add capacity to the existing system. Construction of the replacement sewer, scheduled to begin in April 2000, is proposed to occur within residential and commercial areas of Winchester. Portions of the new sewer alignment are along sections of the historic route of the Middlesex Canal. An Archaeological Reconnaissance Survey and Intensive Archaeological Survey was prepared during the planning and design phases of the project. These surveys showed that the Cummingsville Branch Replacement Sewer Project might cross over remains of the Middlesex Canal.

The MOA commits the MWRA to develop a Cultural Resources Monitoring Plan consistent with the "Secretary of the Interior's Standards and Guidelines for Archaeological Documentation" and to monitor construction activities that may effect the Middlesex Canal consistent with the Massachusetts standards for conducting archeological investigations.

The execution of the MOA evidences that the Corps has taken into account the effects of the Cummingsville Branch Replacement Project on historical and archaeological resources. The Corps must satisfy this requirement prior to the issuance of a Clean Water Act Section 404 wetland permit.

CONTRACT AWARDS

Technical Assistance Consulting Services – Instrumentation: Elizabeth Davidson & Associates

The Board voted to approve the recommendation of the Consultant Selection Panel to select Elizabeth Davidson & Associates to provide technical assistance consulting for Instrumentation services to the Authority, and to authorize the Executive Director, on behalf of the Authority, to execute a contract with Elizabeth Davidson and Associates for an initial one-year phase, in an amount not-to-exceed \$50,000; further, to authorize the Executive Director to renew said contract for up to two additional one-year phases for similar terms and conditions and the same annual not-to-exceed amount.

The purpose of this technical assistance contract is to make available to the MWRA, on a continuing as-needed basis, the services of a consultant with expertise in Instrumentation to perform unanticipated projects. The Consultant will be on call to provide agency-wide, task

order based services under a one-year contract, renewable for two additional one-year phases.

Deer Island Digester Maintenance: Whiteford Environmental, Inc.

The Board voted to approve the award of a contract for Deer Island Digester Maintenance to the lowest responsive bidder, Whiteford Environmental, Inc., and to authorize the Executive Director, on behalf of the Authority, to execute and deliver said contract in the bid amount of \$429,440 for a duration of 200 calendar days from the Notice to Proceed.

The design of the Deer Island Wastewater Treatment Plant included the use of egg-shaped digesters for a number of reasons, but in part because of their anticipated ease of repairs and lower maintenance costs as compared to traditional hard-chined digesters. However, periodic cleaning is still required. Operations and Maintenance staff have found that in the first three to five years of operation, certain operating elements of the digesters have become clogged with debris such as grit and small pieces of rags. This situation should be addressed in order to maintain the expected efficiency of the digesters and to avoid the possibility of permanent damage to equipment.

Various process adjustment modifications have been made by plant staff to minimize this debris accumulation. This contract will assist the plant staff in drawing down all digesters – one at a time – for a baseline cleaning and inspection. The results of this work will aid in planning the frequency of such “cleaning” in the future.

Map Data Upgrade: Applied Geographies, Inc., Contract 6418

The Board voted to approve the recommendation of the Consultant Selection Panel to select Applied Geographies, Inc. to provide consulting services to the Authority for the Map Data Upgrade Project and to authorize the Executive Director, on behalf of the Authority, to execute a contract with Applied Geographies, Inc. in an amount not to exceed \$174,116 for a duration of 24 months from the Notice to Proceed.

This contract is one of a series of steps, which MWRA has taken to upgrade and align the base map data on which the GIS system runs. In 1995, MWRA performed analyses showing that the cost to upgrade map data would be more than offset by savings for design engineers and operating staff, achieved by having access to more accurate map data.

Contract Operator Advisory Services for the Sludge Processing Facility: Infrastructure Management Group, Inc., Contract S317

The Board voted to approve the recommendation of the Consultant Selection Panel to select Infrastructure Management Group, Inc. to provide contract operator advisory services for the re-bid of an operations contract for the sludge to fertilizer pelletizing operations facility and to authorize the Executive Director, on behalf of the Authority, to execute a contract with Infrastructure Management Group, Inc. in an amount not to exceed \$327,070 for a term of 18 months.

New England Fertilizer Company (NEFCo) has operated the sludge processing facility since start-up in December 1991. The NEFCo contract is due to expire on December 31, 1999. MWRA staff has negotiated a 12-month extension to the contract, to December 31, 2000. Faced with the upcoming expiration of the NEFCo contract, the MWRA is working to solicit bids from potential contract operators who wish to be responsible for the operation of the plant beginning in January 2001. A number of complex issues are presented in this re-bid process,

including ongoing construction until the beginning of the contract term for the new operator. Staff expects that the new contract term could be ten years. Based on the current cost to MWRA of NEFCo's operation of the plant (\$10+ million per year), the nominal value of the new operating contract will be \$100 million.

Mr. Carroll stated, "I can't understand why the MWRA staff can't operate this facility themselves." Staff replied, "Manpower is the issue. Staff has been down-sized to six people, with four positions filled, and they are busy with permitting and compliance issues." Mr. Spinney asked, "Has there been a consideration to bring this work in-house?" Mr. MacDonald stated that there is a relationship between how this sensitive equipment is run and its asset life. One advantage of a Contractor is the responsibility for the equipment is in someone else's hands.

Senator Durand noted, "At the last meeting, the Board met with the Unions. Is this something that the MWRA employees could do?" Mr. MacDonald stated, "Our initial judgment is to contract it out; however, we have a consultant examining our options, including in-house operation, which would require marketing as well. Other options include selling the whole plant, and contracting for 30 years."

CONTRACT AMENDMENTS/CHANGE ORDERS

Interim Sludge Processing & Disposal Services: New England Fertilizer Company, Contract 5652, Amendment 5

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 5 to extend the time for completion of Contract No. 5652 with New England Fertilizer Company, Interim Sludge Processing and Disposal Services, to December 31, 2000, lowering the price per dry ton for pelletizing by four percent to a range of \$297.22 to \$400.90 and lowering the price for barging and dewatering by four percent to \$29.33 per thousand gallons, effective January 1, 2000, and containing other suitable terms and conditions.

The New England Fertilizer Company (NEFCo) was awarded Contract 5652 relating to the pelletizing facility on March 15, 1988. The contract was divided into two parts, the first of which provided for the design and permitting of the facility, and the second of which provided for operation of the facility, including sludge transporting, processing and disposal. The original NEFCo contract contained an end date of December 31, 1995 with renewal options at the original unit prices, terms and conditions. In March 1995, following six months of staff negotiation, an extension to the contract through December 31, 1999 was approved by the Board, which provided for significant reductions in the unit prices for drying as well as barging and dewatering.

In September 1998, the Board was advised that staff would probably seek another one-year negotiated extension of the NEFCo contract because of two considerations that argued against attempting to re-bid the contract for a planned handing over (if required) on December 31, 1999. One was the concern that the existing operator not be lulled into thinking that Y2K compliance issues could be passed off to a successor operator who would have to take over the plant, literally at the onset of Y2K. The other was the recognition that there were serious delays in construction of the plant expansion (originally scheduled for 1997 and now likely to be completed no earlier than the beginning of 2001).

Master Planning & CSO Facilities Planning: Metcalf & Eddy, Inc., Contract 5716, Amendment 8

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 8 to increase the contract price on Contract No. 5716 with Metcalf & Eddy, Inc. (M & E), Master Planning and CSO Facilities Planning, in the amount of \$419,766, to an amount not to exceed \$19,125,977. The initial contract cost was \$9,674,835, with \$9,451,142 in amendments to date. The contract term will end December 31, 2000.

Staff recommended that Contract 5716 be amended to provide services related to compliance with regulatory conditions in the recently issued Alewife Brook/Upper Mystic River variance and services necessary to reevaluate sewer separation upstream of Alewife Brook in Cambridge. M & E will provide additional modeling and engineering support to reevaluate CSO control goals and alternatives for Alewife Brook to determine if sewer separation remains the most cost-effective CSO control alternative. The reevaluation will take into account the most recent information obtained by Cambridge about its system. A report on the results of the reevaluation is due by February 2000.

Mr. Carroll asked, "How much of this Change Order is related to the Cambridge problem?" Mike Hornbrook replied, "One variance, Alewife-Mystic, is \$173,000, with \$247,000 apportioned to Cambridge. New data from Cambridge will be plugged into our engineering analyses to re-evaluate Cambridge's needs."

Residuals Processing Facilities, Phases I and II: Camp Dresser & McKee, Inc. (CDM), Contract 5758, Amendment 6

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 6 to extend the time for completion of Contract No. 5758 with Camp Dresser & McKee, Inc. (CDM), Design and Engineering Services During Construction (ESDC) for Residuals Facilities Phases I and II by three months from September 30, 1999 to December 31, 1999. No additional funds are requested.

After turnover to the Deer Island Wastewater Treatment Plant (DITP), two problems were encountered with the polymer conveyor system. The Amendment for a time extension will allow CDM to complete a detailed design to address operational issues encountered with the polymer loading system. The award value of the construction contract was \$97,452,000 and now stands, with approved change orders, at \$101,851,405. Mr. Carroll asked, "Why is CDM doing extra work for nothing?" Staff responded that there is still money in the contract to apply for this safety issue.

Ancillary Design Modifications – Phase III: R. Zoppo Corp./Interstate Engineering Corp., J.V., Contract 6180, Change Order 48

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 48 to increase the contract price on Contract No. 6180 with R. Zoppo Corp./Interstate Engineering Corp., a joint venture, Ancillary Design Modifications – Phase III, in an amount not to exceed \$117,339. To date, total Change Orders of \$5,723,043.63 have been added to the original contract price of \$28,191,605.00, increasing the contract amount to \$33,914,648.63. No time extension is required. This Change Order also authorizes the Executive Director to approve additional change orders not to exceed the aggregate of \$250,000.

Previously, platforms had been added to the top of the carbon adsorber stacks to allow access by DITP personnel to maintain the heating coils. The addition of the heating coils and access platforms to the carbon adsorbers was designed and bid in this construction contract. However, DITP personnel determined that platforms larger than the original design must be provided so that staff can access the entire heating coil to perform required maintenance and repairs. This change results from an error by the Project Design Engineer and will be reviewed as part of the overall assessment of the designer's performance on this contract to determine liability for damages and follow-up actions.

Walnut Hill Water Treatment Plant Design Management: Metcalf & Eddy, Contract No. 6134, Amendment No. 2

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 2 to extend the time for completion of Contract No. 6134 with Metcalf & Eddy, Inc., Walnut Hill Water Treatment Plant Design Management, by six months from October 15, 1999 to April 15, 2000 with no increase in the contract amount.

The court process related to determining the treatment technology to be implemented at Walnut Hill Water Treatment Plant has resulted in a change to the construction schedule for this project. The design of the common facilities was completed first and construction was started in March 1999. This allowed more time for the treatment technology decision to be made. The additional time made available by constructing the common facilities first was utilized to further improve the ozonation and filtration design documents in several areas including construction sequencing, implementation of value engineering cost reduction recommendations, and clarity of the drawings. All are expected to reduce construction cost. The original award was \$1,701,732, with one previous Amendment of \$176,735, for a total adjusted cost of \$1,878,467.

Norumbega Reservoir Preliminary Design and EIR: Camp Dresser & McKee, Inc., Contract 5041, Amendment 8

The Board voted (with Senator Durand abstaining) to authorize the Executive Director, on behalf of the Authority, to approve Amendment No. 8 to increase the contract price on Contract No. 5041 with Camp Dresser & McKee, Inc., Norumbega Reservoir Preliminary Design/EIR, in an amount not to exceed \$160,000, from \$2,712,724.53 to \$2,872,724.53, and to extend the time for completion by 60 days, from August 30, 1999 to October 31, 1999.

The original contract was for a term of 36 months through August 1995. However, the completion of the contract was delayed in 1995 when the Draft EIR was published and the MEPA Unit of the Executive Office of Environmental Affairs and the MWRA Board of Directors determined that land acquisition issues should be resolved for the project before publishing the Final EIR. Approximately 36 acres of land were required from the Town of Weston and the Weston Forest and Trail Association for the proposed water tank. In November 1997, legislation was enacted by the Massachusetts legislature to transfer the land to MWRA and to authorize MWRA to use a design/build project delivery method for the Norumbega Covered Storage project.

Ms. Hicks admonished staff for presenting a request to the Board in October for an extension of time beginning in August. The role of the Board is nullified when already complete initiatives require approval. This is a flaw in the current process and needs to be rectified.

Fells Reservoir Covered Storage Project: Barletta Engineering Corp., Contract 5088, Change Order 17

The Board voted to authorize the Executive Director, on behalf of the Authority, to approve Change Order No. 17 to increase the contract price on Contract No. 5088 with Barletta Engineering Corp., Fells Reservoir Covered Storage Project, in the amount of \$95,347.68. The original contract price was \$13,157,276.00. Change Orders to date total \$1,506,017.18 bringing the adjusted contract total to \$14,663,293.18, with no increase to the Contract Time. And, further, to authorize the Executive Director to approve additional change orders as may be needed to Contract No. 5088 in amounts not to exceed the aggregate of \$250,000.

This Change Order covers Lighting Fixtures/Wiring Changes - \$26,824.19; Elastomeric Roof Coating - \$14,768.64; Gas Monitoring Systems - \$45,991.94; Replacement of a Stilling Well - \$2,571.60; and the installation of Control Panels - \$5,191.31. Joe Favaloro, Executive Director of the Advisory Board, stated, "There seems to be design omissions. Will the Authority try to recover these funds?" Staff replied that the design firm noted their error, and the contract will be reviewed at the end to try for recovery."

OTHER BUSINESS

Bottled Water Marketing – Feasibility Study

The Board voted to approve a Motion made by Marie Turner that the Authority investigate the feasibility of the MWRA selling bottled water. She stated that it would provide a service to the ratepayer and the Commonwealth of Massachusetts, and would be a good public relations tool.

This summary does not include every item discussed by the Board, nor the full extent of the discussions. Please contact Mary Ann McClellan at the Advisory Board Office with questions, comments and requests for additional information.